

The following claim listing is meant to replace all previous claim listing.

1. (Currently amended) A process for producing branched fatty acids, comprising :
  - a. introducing a recombinant nucleic acid coding for a methyl transferase catalyzing the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid into a plant cell, a plant tissue or a seed of a plant;
  - b. regenerating a transgenic plant from the plant cell, the plant tissue or the seed of the plant wherein said transgenic plant produces branched fatty acids; and
  - c. recovering said branched fatty acids from said transgenic plant.
2. (Previously presented) The process according to claim 1, further comprising the step of extracting the branched fatty acids.

3 – 11 (Cancelled)

12. (Currently amended) A recombinant nucleic acid comprising:  
~~a nucleic acid coding for a methyl transferase,~~  
~~a plant expressible promoter, and, a 3' transcription termination region.~~  
in the following order:
  - a. a plant expressible promoter regulating the expression of a nucleic acid coding for a methyl transferase catalyzing the transfer of a methyl group to an aliphatic chain of an unsaturated fatty acid;
  - b. a nucleic acid coding for said methyl transferase; and
  - c. a 3' transcription termination sequence.
13. (Previously presented) The nucleic acid according to Claim 12, wherein the promoter expresses the nucleic acid in a seed of a plant.

14 - 16 (Cancelled)

17. (Previously presented) A vector comprising a recombinant nucleic acid according to claim 12.

18. (Previously presented) A plant cell comprising a recombinant nucleic acid according to Claim 12.

19. (Cancelled)

20. (Previously presented) A transgenic plant comprising at least one cell according to claim 18.

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21. (Previously presented) A transgenic plant comprising at least in one part of its cells, a nucleic acid according to Claim 12.

22. (Cancelled)

23. (Previously presented) A process for preparing branched fatty acids from a transgenic plant whose cells contain a recombinant nucleic acid according to Claim 12, comprising :

culturing said transgenic plant in field;  
recovering the seeds from said transgenic plant; and  
extracting the branched fatty acids from these seeds.

24 - 29 (Cancelled)

30. (Currently amended) The plant cell according to claim 18 ~~19~~, wherein said oleaginous plant cell is colza, sunflower, peanut, soya, flax or maize.

31. (Previously presented) The process according to claim 1, further comprising the steps of :

culturing said plant cell in a medium suitable for growth; and

extracting and purifying the branched fatty acids from said plant cell or from the supernatant of said medium.

32. (Currently amended) The nucleic acid according to Claim 12, wherein the plant expressible promoter is a nopaline synthase promoter ~~region~~ (nos) or an octopine synthase promoter ~~region~~ (ocp) or a mannopine promoter ~~region~~ or a agropine promoter ~~region~~ or an acyl carrier protein promoter ~~region~~ (ACP).

33. (Currently amended) The nucleic acid according to Claim 12, wherein the plant expressible promoter is an acyl carrier protein promoter ~~region~~ (ACP) or a napine promoter.

34. (Previously presented) The nucleic acid according to Claim 12, wherein the plant expressible promoter is a promoter of a 35S cauliflower mosaic virus gene or a promoter of a 19S cauliflower mosaic virus gene.